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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR   | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/756,439      | 01/12/2004  | Gregg Bernard Lesartre | 200313780-1         | 2144             |

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| EXAMINER |
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ALPHONSE, FRITZ

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| ART UNIT | PAPER NUMBER |
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2133

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE  | DELIVERY MODE |
|--|------------|---------------|
| 3 MONTHS                               | 02/22/2007 | PAPER         |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

# Office Action Summary

Application No.

10/756,439

Applicant(s)

LESARTRE, GREGG BERNARD

Examiner

Fritz Alphonse

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 04 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

  
GUY LAMARRE  
PRIMARY EXAMINER

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

0.1 This Office Action is in response to the amendment filed on 12/04/2006. Claims 1, 4-8, 11-21, 24 are amended.

#### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1, 11, 12, 21, 24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Particularly, as to claims 1, 11, 12, 21 and 24, it not clear to the Examiner what is meant by the abbreviation "SERDES".

In addition, claim 12 does not represent a system for omitting essential structural elements. For example, claim 12 recites the limitations "...the system comprising: the transmitting end obtaining data and calculating a disparity for the data; the receiving end cooperating with...". It seems that claim 12 does not have the structure of a system claim.

#### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claims 1-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Benson (U.S. Pat. No. 5,907,566) in view of Chandran (U.S. Pat. No. 5,068,854).

As to claim 12, Benson (fig. 2) discloses a system to detect errant data communicated across a data communications architecture comprising one or more operatively coupled SERDES communication links having a transmitting end and a receiving end, the system including the transmitting end (serializer 11) obtaining data and calculating a disparity for the data; the receiving end (deserializer 15) cooperating with the serializer to receive data and the calculated disparity; and a first error code based on the disparity calculated by the transmitting end (col. 6, lines 13-31).

Benson does not explicitly disclose an error code for identifying errant data being communicated between the serializer and the deserializer. However, the limitations are clearly disclosed by Chandran (col.4, lines 28-51).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to improve upon the error detection device, as disclosed by Chandran. Doing so would enhance the capability of detecting transmission errors.

As to claims 13-15, Benson (fig. 2) discloses a system, wherein the first error code is calculated at the transmitting end and communicating end (11) and communicated to the receiving end (15); the first error code is calculated at the receiving end based on a calculated using values from the data communicated from the transmitting end to the receiving end (col. 6, lines 17-31).

As to claims 16-20, Benson (fig. 2) discloses a system, wherein the first error code is calculated and communicated by the transmitting end (11) when communicating the data to the

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receiving end (15) and the second error code is calculated at the receiving end upon receiving the data from the transmitting end. Benson discloses a system comprising a data buffer for storing data for communication and re-communication (col. 7, lines 4-15).

As to claims 21-23, method claims 21-23 correspond to apparatus claim 12-15; therefore, they are analyzed as previously discussed in claims 12-15 above.

5. Claims 1-11, 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fredrickson (U.S. Pat. No. 6,154,870) in view of Benson (U.S. Pat. No. 5,907,566).

As to claims 1 and 11, Fredrickson (fig. 1) discloses a data communication architecture and a computer readable medium method to detect errors in data communications including calculating a disparity for data being communicated by one or more operatively coupled serializers in the transmitting end (col. 1, lines 11-23); calculating a serializer data communication error code based on the calculated disparity (col. 4, lines 40 to col. 5 line 3); communicating data from the serializers to one or more operatively coupled deserializers in the receiving end; calculating a disparity on communicated data received by the deserializers to generate a deserializer data communication error code (col. 3, lines 3-12). Fredrickson discloses a method that can be implemented using a computer readable medium (col. 12, lines 31-44).

Fredrickson differs from claim 1 in that his system does not specifically teach comparing the value of the serializer data communication error code with the value of the deserializer data communication error code.

However, in the same field of endeavor, Ramamurthy discloses a test method, which compares the value of the serializer data communication error code with the value of the deserializer data communication error code (col. 4, lines 56 through col. 5 line 15).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to combine the signal error-correction system of Fredrickson with the test method, as disclosed by Ramamurthy. Doing so would provide an improved method and means for testing integrated communication circuits which quick enough to be used in a production setting which is inexpensive to implement.

As to claims 2-5, Fredrickson (fig. 1) shows a method determining whether the value of the serializer data communication error code equals the value of the deserializer data communication error code; and further determining the values of the serializer data communication error code and the deserializer data communication error code are not equal sending a control signal from the deserializer to the serializer (col. 5, lines 15-46).

As to claims 6-10, Fredrickson (fig. 1) shows a method comprising communicating the serializer data communications error code by the serializer to the deserializer. The method further comprising encoding the serializer data communications error code into a packet of data having  $n$  bits, wherein  $n$  is a value dependent on the number of communications channels employed by the serializer and the deserializer when performing data communications operations (col. 5, 38 through col. 6 line 65).

As to claim 24, the claim has substantially the limitations of claim 1; therefore, it is analyzed as previously discussed in claim 1 above.

*Response to Arguments*

6. Applicant's arguments with respect to claims 1-24 have been considered but are moot in view of the new ground(s) of rejection.

*Conclusion*

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks, Washington, D.C. 20231

**or faxed to:** (703) 872-9306 for all formal communications.

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Fourth Floor (Receptionist).

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fritz Alphonse, whose telephone number is (571) 272-3813. The examiner can normally be reached on M-F, 8:30-6:00, Alt. Mondays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert De Cady, can be reached at (571) 272-3819.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-3824.

Information regarding the status of an application may also be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

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applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Fritz Elphonse

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February 19, 2007